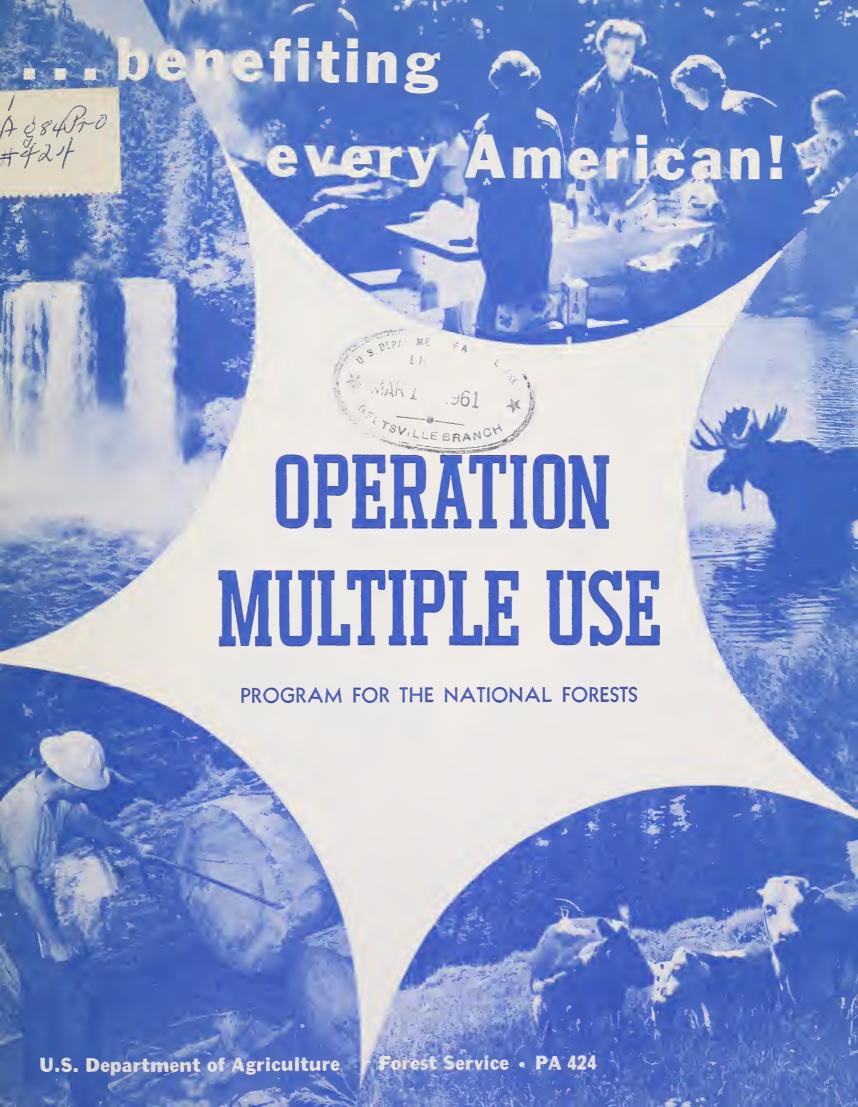
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# every American!

OPERATION
MULTIPLE USE

#### PROGRAM FOR THE NATIONAL FORESTS

Operation Multiple Use is a long-planned action program—an exciting race against time—now underway throughout the 181 million acres of National Forests in 39 States and Puerto Rico. This conservation program is dramatically stepping up management and development of the resources of the National Forests to meet the increasing demands on these resources during the next 10 to 15 years and in the years beyond. By providing greater use, fuller enjoyment, more jobs and expanding wealth, from the National Forests, Operation Multiple Use is benefiting every American!

#### Multiple Use in action

More and more people are using and depending on the National Forests every year. There is a growing interest in outdoor recreation, a growing need for greater supplies of clear, clean water, for more trees that will yield good wood, for more grass to feed livestock, for more food and homes for the wild animals, fish, and birds.

National Forest acres literally must be stretched to produce the extra goods and services required of them. There is no more land "just over the rise" to accommodate the Nation's burgeoning population and economy.

Multiple Use has proved the most effective form of forest land management yet devised in terms of providing greatest overall benefits from the National Forests. Operation Multiple Use, simply stated, is accelerated Multiple Use in action—conserving the basic land resource while at the same time producing high-level, sustained yields of water, recreation, timber, forage, and wildlife harmoniously blended for the use and benefit of the greatest number of people.

On the following pages are the highlights of Operation Multiple Use. Through this account, boys and girls who sit at wooden desks in schools across the land and write with wooden pencils on paper milled from wood, hardy hikers and riders who find their greatest enjoyment in the wilderness areas of the National Forests, city housewives who help plan the family outings, and farmers, ranchers, and loggers—every American wherever he lives and whatever he does—may see how Operation Multiple Use benefits him.

OPERATION MULTIPLE USE

## . . providing

Water is the most valuable crop produced on many National Forests. Thousands of towns and cities, and millions of people throughout the Nation depend on National Forest watersheds for steadily flowing, lifegiving streams of clean, clear water. This is one of the indispensable roles of these public lands: to continue forever the task of gathering, storing, and regulating the flow of great quantities of water.

But the task grows ever greater. America's millions are using more and more water each day for power and industry, for their homes and for the farms that grow their food—one-half of all the water consumed is used for irrigation. By 1975 these Americans and their children will need nearly twice the amount of water used today, or a total increase exceeding the daily flow of 13 Colorado Rivers.

Operation Multiple Use is helping to meet the growing need by intensifying the management, rehabilitation, and protection of National Forest watersheds, building into these critical areas a capability for producing continuing and greater yields of good water.

It is on these watersheds, particularly the high mountain forests, that much of the water used by the Nation comes first to earth as rain or snow to begin the long journey through underground channels and down surface streams and rivers to the people and their land. It is in these water-gathering forests that Operation Multiple Use is at work, improving and protecting water sources so that more and better water can be produced for the young American just born, for another like him who will arrive in a matter of seconds, and for all the others who will follow.

### more and better water

#### Some of the big jobs underway . . .

Completing soil surveys on 33 million acres, an area larger than the State of Alabama.

Stabilizing 10,000 miles of gullies and channels.

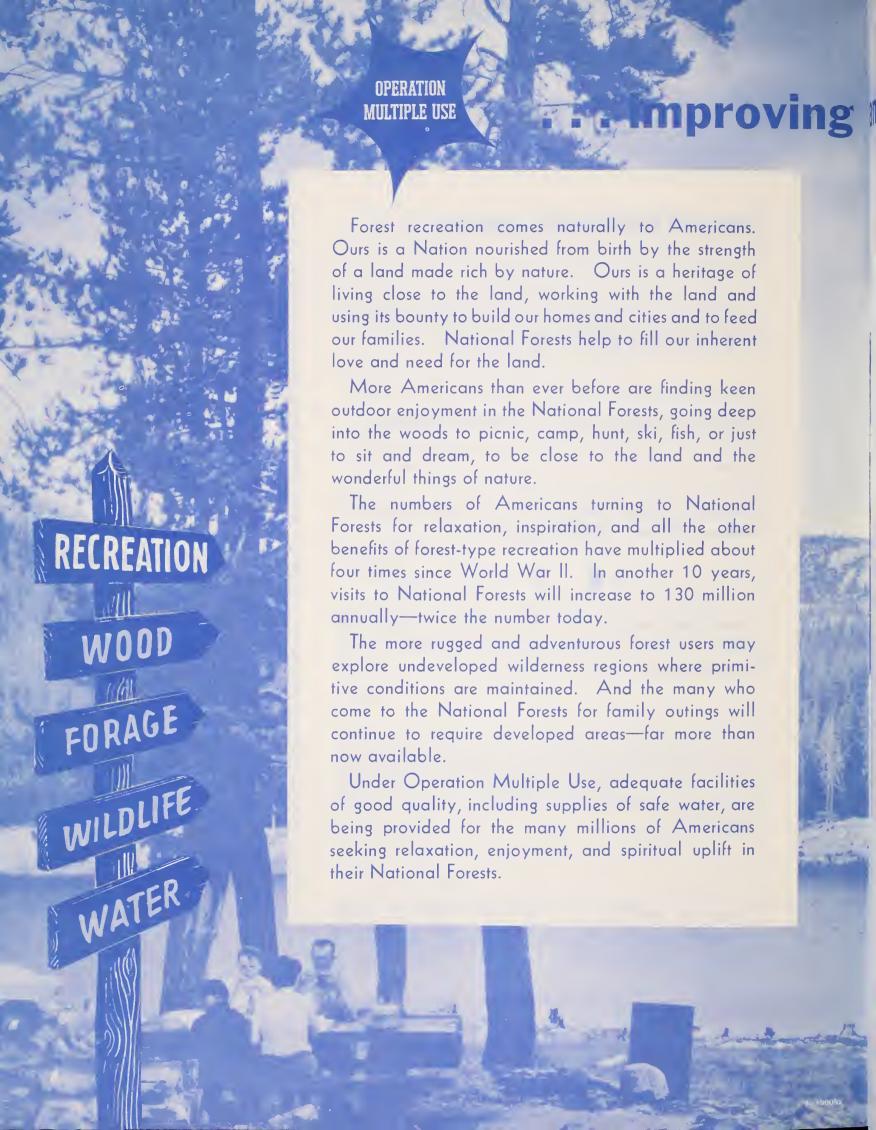
Controlling sheet erosion on 1.3 million acres and stream pollution on 170 projects.

Controlling erosion on 14,000 miles of roads and trails—4½ times the distance between New York and San Francisco.

Inventorying water supplies and yields on many areas and studying the effect of range, timber, and other uses and management practices on water quality and yield.

Preparing management plans for National Forest watersheds which are the sole or major source of municipal water supplies.





# and expanding recreation

#### Highlights of current projects . . .

Rebuilding and expanding 4,700 camp and picnic sites already in existence.

Constructing 10,000 new camp and picnic areas with more than 100,000 new family units—enough to accommodate all the people of a city the size of Denver at one time.

Improving dams and spillways as necessary to keep them in safe condition for recreational use.

Providing adequate sanitation, cleanup, safe water, fire prevention, and public safety at all developed recreation sites and in heavily used unimproved areas.

Revising and completing recreation management plans for all administrative units.

Inventorying and evaluating all recreation resources, partly in cooperation with the Outdoor Recreation Resources Review Commission.







OPERATION
MULTIPLE USE

WOOD

FORAGE

WILDLIFE

RECREATIO

### ... producing

In the early days, America was a green-canopied forest stretching almost unbroken from the Atlantic to the Great Plains and beyond the plains to the Pacific. The years passed and as the Nation took form its people carved deeper and deeper into the forest, taking generously of all that grew there. The wood supply seemed unlimited.

Today it is clear that only through progressive forest practices and good management can the Nation be assured its forests will continue to yield ample wood supplies. Virgin timber is all but gone from the forests and on all sides they are being forced back by our building Nation: our homes, highways, and spreading communities. The forests cannot expand, yet with the passing years we are consuming more and more wood and wood products.

A substantial portion of the Nation's wood supply—at present 9 billion board feet each year—comes from National Forests. In the next decade these public forests should yield a harvest of at least 11 billion board feet each year. After that, still greater quantities of timber must come from these same lands. This calls for intensified management.

When timber is harvested on National Forests the cutting is done in such a way as to protect soil, water, and the other forest resources. The objective is to balance, at a high level, timber cut against the amount and kind of timber growing. This balancing—or management for sustained yield—insures continuing crops of wood and water in steady supply and benefits other forest resources.

Operation Multiple Use, by growing more and better quality wood, is helping to weight the balance in favor of the future.

# more and better quality wood

Priority work in progress . . .

Planting or seeding 3.3 million acres, a total area larger than Connecticut.



Increasing the salvage and sale of dead, dying, and diseased trees, leaving the forest in a healthy condition to grow more and better timber in a shorter time.

Pruning, thinning, and weeding young timber stands covering 17,000 square miles—twice the size of Massachusetts.



Developing and applying on timber sale areas higher standards of management to insure better reproduction, to reduce fire, insect, and disease hazards, and to prevent erosion.





OPERATION MULTIPLE USE

# ... insuring

Beefsteak on our tables may seem a far cry from National Forests. Yet the steaks or lamb chops we enjoy may once have summered on the hoof in some high alpine meadow on one of the western National Forests.

Grazing of cattle and sheep is one of the principal uses of 68 million of the National Forests' 181 million acres. In many places livestock graze on lands also used to produce crops of water, wood, and wildlife.

National Forest grazing is managed to keep the numbers of cattle and sheep in balance with available forage, to insure larger crops of forage, to stabilize the soil, and to prevent excessive water runoff in watershed areas.

A variety of products comes from the millions of cattle and sheep grazing the National Forests each year. Wool for clothing, leather for shoes, and other products from these public forest rangelands help to sustain the livestock industry and many communities.

The need for livestock products is increasing. The consumption of meat, for example, is expected to double by the end of the century. Because National Forests will be called upon to help satisfy this increasing need, Operation Multiple Use, by accelerating Multiple Use management, is improving the range resource to provide more food for greater numbers of livestock—more meat, wool, and hides for more Americans.

RECREATIO

## better range, better grazing

#### A few of the big jobs being done . . .

Completing range analyses and management plans on 8,800 range allotments.

Improving the range through control of undesirable or poisonous range plants or planting of new vegetation on nearly 7,000 square miles.

Building some 18,000 miles of fences—enough fencing to enclose 115 ranches the size of the King Ranch in Texas.

Constructing nearly 10,000 water facilities.

Completing reconstruction or rehabilitation of range improvements where necessary, and maintaining other improvements.

Adjusting numbers of grazing animals on the range to balance range use with available forage.





### OPERATION MULTIPLE USE

## ... providing

Wildlife is a renewable, natural forest resource just like grass and trees, a resource that can be grown, enjoyed and, in many instances, put to practical use like any other crop. Accordingly, the wildlife habitat on National Forests is managed as are other resources, both as an entity in itself and in relation to water, wood, recreation, and forage for domestic livestock.

More than one-third of all the big game in the Nation is on the National Forests. Countless small furbearing animals follow game trails cut by deer, elk, bear, and moose, and great flocks of wild birds find their homes and food in the marshes and among the growing trees. Fish and waterfowl of many varieties abound in and on 81,000 miles of streams and more than two million acres of natural lakes and impounded waters.

The National Forests are the great hunting and fishing grounds of America. To keep game and fish populations in balance with the available food, each year millions of hunters and fishermen help harvest the surplus wildlife, supplementing the family larder as in days of old, while gaining relaxation and enjoyment. Millions more get equal pleasure and thrills from just seeing the wild animals and birds in their native habitat.

Our rapidly developing Nation is exerting an evergrowing impact on the National Forests in increased use of the wildlife resources. Under Operation Multiple Use, fish and wildlife habitat is being improved and developed to meet this tremendous increase in sportsman and esthetic use.

RECREATION

FORAGE

# better hunting and fishing

#### The more important work underway . . .

Inventorying and evaluating wildlife habitat resources in cooperation with the States in which the National Forests are located.

Increasing food and cover on 1.5 million acres of key wildlife areas.

Improving 7,000 miles of fishing streams and 56,000 acres of lakes by stabilizing banks, planning streamside cover, and constructing channel improvements.

Developing wildlife openings, food patches, and game walkways in dense vegetation by clearing or by controlled burning on about a half million acres.

Participating in planning, inspection, and control phases of all habitat improvement projects conducted on National Forest lands by States and other Federal agencies to insure that the projects will benefit wildlife and be in harmony with other resource values.

Revising and completing wildlife habitat management plans for all administrative units, assuring proper coordination between uses of wildlife habitat and other resources.





Operation Multiple Use is being made more effective by a number of activities that go hand in hand with resource management and development.

### . protecting the forests

Unlike a field of corn which is grown and harvested in a single season, a forest takes decades to grow and mature. Over the years of growth, if its trees are to be tall and straight and of good quality, they must endure and survive many natural enemies: disease, insects, fire, weather, and harmful animals. Each year these destructive forces take a tremendous toll of the living trees and other renewable resources. They are a constant threat to the watersheds and their life-giving, life-supporting flows of water.

The most damaging enemies are disease and insects. Protection against these destroyers is being increased 50 percent through quicker detection of infested areas, stepped-up control from the air and on the ground, and harvesting of the old-growth timber stands which usually are very susceptible to infection.

The cruelest enemy is fire, for it can wipe out the growth of a century in a single day. Wildfire kills small trees, maims the bigger trees and opens the way for disease and insects. Operation Multiple Use is improving protection on 125 million acres of National Forest timberlands and critical watersheds to meet very severe fire situations.

To offset the extensive damage to forest growth by animals such as mice and porcupines, control of these pests is being extended to more than 11 million acres of high-value forage and commercial timberland areas.

#### ... opening up the fore

More than 286,000 miles of highways, development roads, and trails wind their way through the picturesque National Forests. This transportation network helps unlock the multiple resources of these forest lands for the benefit of the Nation. Millions of Americans visiting National Forests use the roads and trails to reach favorite picnic grounds and campsites, fishing



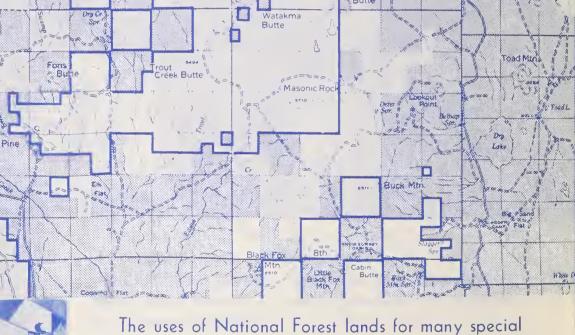
streams, and hunting areas. Loggers use the roads to harvest and bring timber to market. The forest rangers and their work crews travel these same routes in performing their daily jobs.

Operation Multiple Use is opening up the forests still more in order to meet the Nation's increasing use of National Forests and their resources. Under construction are 90,000 miles of development roads, 30 times the distance between New York and San Francisco, and 8,000 miles of trails. These travel ways are bringing better management and protection to the forests and are making many hard-to-reach areas accessible to recreationists and other National Forest users. Wilderness areas, of course, will continue to remain roadless.

#### ... adjusting the forest lands and their uses

Many National Forests are intermixed with private lands. These scattered tracts make effective management difficult for both National Forest administrators and private landowners. To consolidate these holdings, Operation Multiple Use is exchanging on a land-for-land basis 1.4 million acres of public forest land for private properties within or adjacent to existing National Forests.

To further clarify ownerships and benefit management, 100,000 miles of inadequately located, poorly marked property lines are being surveyed and posted, and corner markers established.



The uses of National Forest lands for many special purposes, such as summer homes, organization camps, and transmission lines are being closely supervised and correlated as part of the Multiple Use management of these lands.

The exploration and development of the immensely valuable mineral resources of the National Forests is continuing at a rapid rate. Integration of this mineral development with the management of the surface resources is being expedited through Operation Multiple Use.



. . intensifying forestr

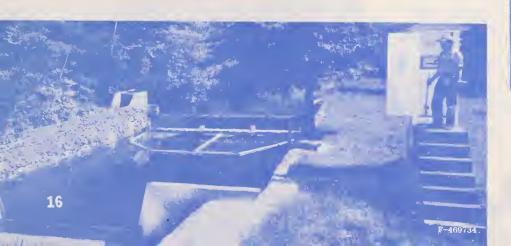
Forest Service research is a major element of this Program for the National Forests. It is providing the necessary link to the future as Operation Multiple Use builds upward from the present.

Research is giving top priority to developing more efficient, effective, and economical methods of managing the water, timber, forage, wildlife habitat, and recreation resources. Accelerated work is going on in 14 specific fields of research related to the five basic National Forest resources. Researchers in forest genetics, for example, are seeking to produce trees superior to present species in growth rate, wood quality, resistance to insects and diseases, and other special qualities.

Another research goal is the development of new and improved practices in watershed management. This work includes studies of water yields, management of snowpacks at high elevations, and soil stabilization.

Research is seeking a better understanding of forest fire behavior and new techniques for eliminating the runaway fires now responsible for 90 percent of fire losses.

Among other research studies underway are those aimed at increasing protection against insects and disease, improving the growth and harvesting of National Forest timber, and aiding in the development of recreation and wildlife resources. To strengthen accelerated research activities, Operation Multiple Use is providing the necessary additional laboratories, greenhouses, scientific equipment, and other facilities.





## . . . benefiting every American!

For this and future generations . . .

More and better water, wood, and forage Improved wildlife habitat Increased opportunities for outdoor recreation

In addition,

Creation of more jobs and payrolls
Stabilized communities

And-

A growing contribution to the Nation's economy through steadily increasing income from the sale of timber and other National Forest products and services.

This, then, is the story in brief of Operation Multiple Use: improving and developing the National Forests for greatest possible service to the Nation.

OPERATION
MULTIPLE USE

PROGRAM FOR THE NATIONAL FORESTS



